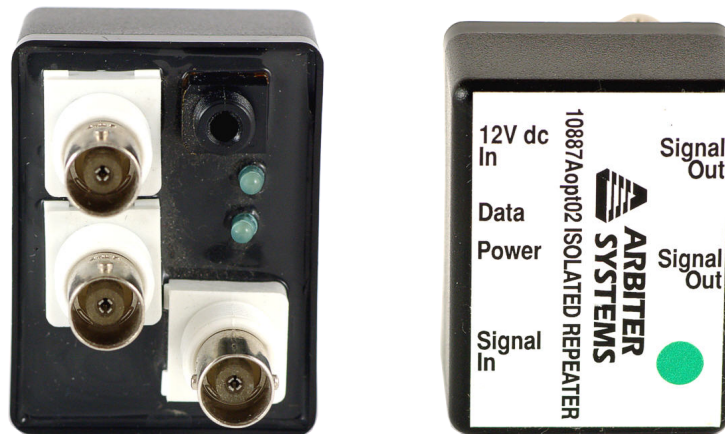




Model 10887A Isolated Repeater Operating Instructions



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1 Introduction

The Model 10887A, Isolated Repeater, propagates digital signals by isolating the source device from the load device(s) and reproducing the input signal at two output connectors. Each output is individually buffered with its own CMOS driver supplying up to ± 75 mA each.

Use the 10887A with any digital timing signal where it may be useful to limit the load current from the source of the timing signal, such as from an Arbiter GPS clock, to reduce losses across the transmission lines. The 10887A will then be able to drive remote loads with 75 mA of drive current from each of the two outputs. Input/Output connectors may be ordered either as pluggable terminal block or BNC female. The 10887A is energized with one of several available power supplies that supply from +9 to +13.5 Vdc. All connector versions of the 10887A can be ordered with the DIN rail mounting option.

2 Specifications

- Input signal: +5 Volt CMOS @ 5 mA via 1 standard pluggable terminal block or BNC connector.
- Output signal: +5 Volt CMOS via 2 standard pluggable terminal block or BNC
- Output drive current: ± 75 mA maximum per output
- Output impedance: 10 ohms
- Input power: +9 to +13.5 Vdc, 70 mA; input power connector, tip positive
- Size without DIN rail: $50 \times 38 \times 50$ mm ($2.0 \times 1.5 \times 2.0$ in.), overall height including connectors.
- Size with DIN rail & BNC: $51 \times 43 \times 72$ mm ($2 \times 1.69 \times 2.83$ in.)
- Size with DIN rail & Pluggable terminals: $51 \times 43 \times 63$ mm ($2 \times 1.69 \times 2.48$ in.)
- Weight with BNC connectors and without DIN rail mounts: 94 g (3.30 oz.)
- Operating Temperature: -10° C to $+50^{\circ}$ C
- Non-operating Temperature: -40° C to $+75^{\circ}$ C

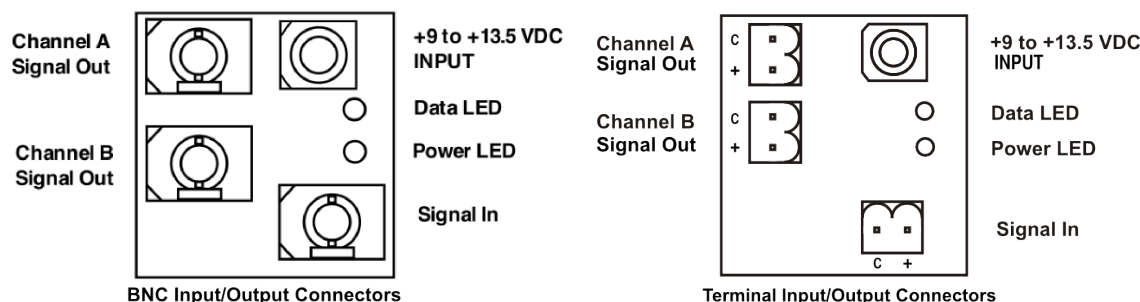


Figure 1: 10887A Connectors and Indicators

2.1 Mounting

The Model 10887A, Isolated Repeater, may be ordered with or without a DIN rail mount attached. With DIN rail mounts, snap the unit into the DIN rail. Without DIN rail mounts, unit may be attached in a number of ways such as tie wraps or double-stick foam tape.

2.2 Installation and Operation

1. To install the Model 10887A, mount the 10887A in a secure place or, if equipped, mount to a DIN rail.
2. Connect the input signal to the Signal In connector.
3. Connect one or two output cables to one or two of the Signal Out connectors.
4. Connect the inlet power adapter to a source of power and connect the power adapter output connector to the 12 Vdc In connector. The green Power LED should illuminate.
5. The green Data LED should illuminate whenever the digital input signal is HI.